The Relationship between Student Motivation and Class Engagement Levels *

Funda NAYIR1

ABSTRACT

Purpose: Student engagement and interest in class are important conditions for active learning. For this they must be highly motivated. In other words, students who have high motivation make an effort to be engaged in class. Thus, knowing students’ motivation level is important for active engagement in class. The aim of the present study is to study the relationship between class engagement and motivation levels among high school students.

Research Methods: We conducted our study using a relational research model. The study population comprised students attending high schools in the Ankara central district. Some 500 high school students selected by simple random sampling in Ankara province were administered the scale. Of the scales responded to, 322 were included in the study.

Findings: When students’ learning orientations were examined, they were seen to have adopted mastery-oriented learning mostly, followed by performance-avoidance oriented and performance-approach oriented learning. When the results of the analysis were viewed according to variables, there is a significant difference in terms of gender, school type, and grade. The result of the present study suggests that mastery-oriented learning is a significant predictor of all dimensions of class engagement.

Implications for Research and Practice: The research has revealed that motivation level is related to class engagement, that vocational school students are affected more by motivational factors and that motivation level decreases as grade level increases. Also, mastery-oriented learning is a significant predictor of all dimensions of class engagement. There is yet more research needed on the gender variable. Along this line it may be suggested that use of intrinsic drives may increase success rates of vocational school students. Teachers and school administrators must use more motivational tools for vocational school students. Also, in-class activities may be planned to make high school seniors more engaged in class. It is believed that the future research must focus on the gender variable and investigate the relationship between the roles of teachers in class and student motivation levels.

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Introduction

Students must be actively engaged and show interest in classes to achieve effective learning in school. For this they must be highly motivated and interested in classes. What is expected from students during the teaching-learning process is to have intrinsic motivation and authentic engagement in classes. To achieve this, students’ motivation levels must first be identified and activities must be planned to promote their active engagement in classes. Therefore, teachers must be aware of their students’ motivation levels and employ motivation strategies to ensure their authentic engagement in classes.

Student engagement, a phenomenon that cannot be directly observed (Schlechty, 2002), is a process that facilitates learning (Turner & Patrick, 2004) and increases academic success (Marks, 2000). Engagement is an important predictor of success. The more students engage themselves in academic activities, the more they will be successful (Harboura, Lauren, Chris & Lindsay, 2015). The fact that students focus on assignments and subjects means that teachers have achieved their intended purpose and students are actively engaged in the learning process. An engaged student dedicates himself to the subject and performs with enthusiasm and care during the learning process because he attributes a value to it. Even when faced with challenges while doing the assignment, a student continues to study and finds a personal value and meaning in his assignment (Schlechty, 2002). Student engagement also means a student’s enthusiasm to engage in the learning process gives him a need to learn, voluntary engagement in learning, and the will to succeed (Bomia, Beluzo, Demeester, Elander, Johnson, & Sheldon, 1997, p. 294).

Student engagement has three dimensions, which are emotional, behavioral, and cognitive (Fredricks, Blumenfeld, & Paris, 2004). A review of the literature shows that these dimensions are associated with different concepts. Table 1 below depicts the dimensions of student engagement and the concepts associated with them.

When Table 1 is examined, students who exhibit behavioral engagement are seen to have good school attendance, partake in school activities, and adhere to school rules. Students who exhibit emotional engagement feel that they belong with the school, show interest in classes and learning and develop positive or negative emotions toward academic and social factors in school. Students who exhibit cognitive engagement are enthusiastic about learning, do not avoid challenging tasks, are aware of their goals and accomplishments, and are able to control themselves. According to Schlechty (2002), a student attributes a value to what he does and shows different levels of engagement based on this value during the process. These levels are examined in five dimensions, namely, authentic engagement, ritual engagement, passive compliance, retreatism, and rebellion.
### Table 1

**Dimensions of Student Engagement**

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Exemplified in the following elements</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral</td>
<td>Participation • Presence • On task • Behavior • Compliance with rules • Effort, persistence, concentration, attention, rates of/quality of contribution • Involvement in school-related activities</td>
<td>Fredricks, Blumenfeld, &amp; Paris (2004)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tyler &amp; Boelter (2008)</td>
</tr>
<tr>
<td>Emotional</td>
<td>Positive and negative reactions to teachers, classmates, • Academic activity and school • Student attitude (thoughts, feelings, outlook) • Perception of the value of learning • Interest and enjoyment • Happiness • Identification with school • Sense of belonging within a school</td>
<td>Fredricks, Blumenfeld, &amp; Paris (2004)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tyler &amp; Boelter (2008), Patrick et al. (2007), Johnson (2008), Hulleman et al. (2008), Walker &amp; Greene (2009), Wentzel et al. (2004), Libbey (2004), Shin et al. (2007), Martin &amp; Dowson (2009), Tsai et al. (2008), Shernoff &amp; Schmidt (2008), Gottfried et al. (2001)</td>
</tr>
</tbody>
</table>

**Reference:** Gibbs and Poskitt, 2010.

In authentic engagement, students find a personal meaning in their activities, have a high level of interest and do not retreat in the face of a challenge. In ritual engagement, students do what is required, but do not attach a personal meaning to the assignment. In passive compliance, students expend minimum effort merely to avoid negative consequences and pay little attention to the details. In retreatism, students reject class activities, learning objectives, and tools and methods to achieve these objectives, and emotionally disengage themselves. In rebellion, students reject class activities and objectives and substitute them with their own new objectives and
tools (Schlechty, 2001). Although class engagement level is addressed in five dimensions in the literature, a study conducted by Nayir (2014; 2015) on high school students suggested there are three dimensions of class engagement. Nayir (2014; 2015) examined class engagement level by adhering to the three dimensions in the literature, including “engagement at rebellion level”, “authentic engagement”, and “ritual engagement”. The present study discusses class engagement level in three dimensions of authentic engagement, ritual engagement and rebellion using the scale developed by Nayir (2014). According to Ryan and Deci (2009), student engagement level is related to student motivation because motivation is an important prerequisite of student engagement in the learning process.

Defining motivation, being the determinant of individuals’ behaviors, according to the self-determination theory, Ryan and Deci (2000) suggests that individuals feel the need to be autonomous, competent, and related. ‘Autonomy’ refers to an individual's choosing his own behaviors, ‘competence’ refers to his adapting to the environment, and ‘relatedness’ means his being close to others (Ryan & Deci, 2000). In other words, individuals perform actions to satisfy these three needs. Failure to satisfy them results in a lack of motivation. Therefore, an individual has different levels of motivation according to his level of need.

Motivation levels are examined under three headings: lack of motivation, extrinsic motivation, and intrinsic motivation. Lack of motivation is a condition in which no meaning is attributed to actions. In extrinsic motivation, individuals demonstrate a specific behavior due to an external influence, for reward expectations or to satisfy their own ego. In intrinsic motivation, on the other hand, individuals demonstrate a specific behavior due to enjoyment or interest in it, or to their instinct to succeed (Reeve, Deci, & Ryan, 2004). At this point, what motivational factors influence students, how these factors should be used, and how motivational level influences student engagement are important. The research suggests that students with intrinsic motivation demonstrate authentic engagement; those with extrinsic motivation demonstrate ritual engagement, passive compliance, and retreatism; and students lacking motivation demonstrate engagement at the rebellion level (Saeed & Zyngier, 2012). The research also suggests that students with intrinsic motivation have a high level of academic success and a low level of concern, and are engaged more than those with extrinsic motivation (Wigfield & Eccles, 2002; Wigfield & Waguer, 2005). In other words, the self-determination theory suggested by Ryan and Deci (2000) is related to the student class engagement level suggested by Schlechty (2002). Figure 1 below shows the relationship between student motivation and class engagement levels.
Figure 1. Relationship between motivation and student engagement

(Saeed & Zyngier, 2012, p. 256)

As seen in Figure 1, students’ motivation levels are related to their class engagement levels. Students lacking motivation are engaged in classes at rebellion level; those with extrinsic motivation are engaged in classes at retreatism, passive compliance, and ritual engagement levels; and those with intrinsic motivation are engaged at an authentic engagement level. At this point, what is important is to promote intrinsic motivation among students.

According to the self-determination theory, individuals define a target and their degree of achievement of this target defines their motivation (Ryan & Deci, 2002). In other words, it may be suggested that students’ intrinsic motivation is related to the meaning they attribute to learning. In other words, student motivation varies based on the learning objective. Pintrich and Schunk (1996) explain this situation with the goal-orientation theory. According to this theory, individuals are intrinsically motivated when they become success oriented. Midgley et al. (2000) studied goal orientation in three dimensions: mastery goal orientation, personal performance-approach goal orientation, and personal performance-avoidance goal orientation.

Learners with mastery goal orientation are individuals who are aware of their competences, focused on self-development, and willing to attain new knowledge and skills (Elliot & Dweck, 1998). Those with performance-approach orientation are individuals who compare themselves to others and want to show themselves more intelligent and successful than others. Those with performance-avoidance goal
orientation are individuals who try to hide their failures, are afraid of making mistakes, and have low self-expectations (Elliot & McGregor, 2001). The research suggests that there is a significant positive relationship between mastery goal orientation and intrinsic motivation (Chan, Wong & Lo, 2012; Pintrich, 2000) and between performance-avoidance goal orientation and extrinsic motivation (Özkal, 2013). Performance-approach goal orientation, on the other hand, is related to both intrinsic and extrinsic motivation (Elliot & Murayama, 2008). Accordingly, students with intrinsic motivation tend to demonstrate authentic engagement, and those with extrinsic motivation tend to demonstrate ritual engagement. The present study aims to determine the relationship between students’ engagement and motivation levels based on the self-determination theory suggested by Ryan and Deci (2000) and the student engagement levels suggested by Schelechty (2001). Knowing how to use intrinsic and extrinsic motivation tools and their relationship with student engagement in classes will help create a supportive learning environment for students (Marsh, 2000). The aim of the present study is to study the relationship between class engagement and motivation levels among high school students. For this purpose, answers to the following questions were sought:

1. What are students’ motivation levels at the mastery goal orientation, performance-approach goal orientation, and performance-avoidance goal orientation dimensions?

2. Does student motivation vary based on gender, grade, and school type?

3. Is there a significant relationship between students’ motivation level and class engagement level?

**Method**

**Research Design**

Conducted using a relational research model, the present study attempted to identify the relationship between motivation level and class engagement level among high school students.

**Research Sample**

The study population comprised students attending high schools in Ankara central district. Selected by simple random sampling in Ankara province, 500 high school students were administered the scale. Of the scales responded to, 322 were included in the study.

**Research Instruments and Procedures**

The Pattern Adaptive Learning Scale (PALS) developed by Midgley et al. (2000) was adapted to Turkish and used to determine students’ motivation levels. This is a 5-point likert-type scale comprising 14 items. The scale comprises three factors: mastery goal orientation, performance-approach goal orientation and performance-avoidance goal orientation. During the adaptation of the scale, a traditional approach was observed. First, the authors’ consent was obtained to translate the scale into
Turkish. Later, it was translated into Turkish and translated back into English. The translations were sent to three experts in the field who spoke both English and Turkish for review of their consistency. It was revised based on the opinions of the experts. The scale’s language equivalence was examined by first sending its English version and then its Turkish version to nine bilingual persons. The correlation coefficient was found as .97 in the correlation analysis. This indicates that there is a strong relationship between the English and Turkish scales. In other words, the scale’s language validity is high.

The scale was developed by Midgley et al. (2000) in three dimensions. Therefore, confirmatory factor analysis (CFA) (Brown, 2006) was conducted first to confirm the scale’s three dimensions. As a result of the analysis, the fit indices are IFI= .95, RFI = .90, RMR = .056, GFI = .92, AGFI = .89, CFI = .95, NNFI = .92, NFI = .94, and RMSEA = .069, particularly chi square is χ²= 188.57; p= 0.00, sd=74, χ²/sd = 2.55. The factor structure of the scale and its standardized values are provided in Figure 2 below.

**Figure 2.** PALS’ Factor Analysis Model (Standardized Values)

“Student Class Engagement Scale” (SCES) developed by the researcher as a three-factor scale was used to determine student engagement levels (Nayir, 2015). When the fit indices of the confirmatory factor analyses are examined, the values are seen to be within acceptable limits. Brown (2006, p. 87) and Kline (2005, p. 139) state that an RMR and RMSEA value is acceptable if it is between .05 and .08. Similarly, AGFI, GFI and CFI values greater than .80 and NFI, NNFI, IFI, and RFI values greater than .80 are deemed to be within acceptable limits. Harrington (2009, p. 54) also said that χ²/sd must be smaller than approximately 4.
The Cronbach’s alpha coefficient was calculated for the PALS's reliability. According to this, the Cronbach’s alpha coefficient for the entire scale and each factor are, respectively, .81, .63, .86, and .70. The Cronbach’s alpha coefficient for each factor in the original scale was calculated as .85, .89 and .74 (Midgley et al., 2000). For SCES, the Cronbach’s alpha coefficient for the entire scale and each factor are, respectively, .76, .85, .80, and .81. The previous analysis results for the scale were, respectively, .78, .86, .83, and .81 (Nayir, 2015).

Data Analysis

Extreme value analysis was conducted first for data analysis, and no extreme value was found for the data set comprising 322 data points. An examination of the distribution normality for the data set showed that the distribution was normal. Arithmetic mean, t-test, ANOVA, correlation analysis, and regression analysis were used in data analysis. Regression analysis was conducted using the stepwise method.

Results

Arithmetic mean of the student views varied between 3.44 and 4.12 in mastery-oriented learning; between 2.58 and 3.58 in performance-approach oriented learning and between 3.15 and 3.70 in performance-avoidance oriented learning. Weighted arithmetic mean of the dimensions was calculated, respectively, as 3.84, 2.97 and 3.48.

T-test analysis, conducted to see whether or not student views varied based on gender and school type variables, are provided in Table 2 below.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Variables</th>
<th>Groups</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>T</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mastery goal orientations</td>
<td>Gender</td>
<td>Male</td>
<td>149</td>
<td>18.78</td>
<td>3.97</td>
<td>320</td>
<td>2.10</td>
<td>.038</td>
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<tr>
<td></td>
<td></td>
<td>Female</td>
<td>173</td>
<td>19.66</td>
<td>3.46</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Performance-approach goal</td>
<td>Gender</td>
<td>Male</td>
<td>149</td>
<td>14.43</td>
<td>5.61</td>
<td>320</td>
<td>1.31</td>
<td>.19</td>
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<tr>
<td>orientation</td>
<td></td>
<td>Female</td>
<td>173</td>
<td>15.25</td>
<td>5.58</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance-avoidance goal</td>
<td>Gender</td>
<td>Male</td>
<td>149</td>
<td>13.89</td>
<td>4.04</td>
<td>320</td>
<td>.61</td>
<td>.95</td>
</tr>
<tr>
<td>orientation</td>
<td></td>
<td>Female</td>
<td>173</td>
<td>13.93</td>
<td>4.44</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mastery goal orientations</td>
<td>School type</td>
<td>Anatolian H.S.</td>
<td>96</td>
<td>18.13</td>
<td>4.30</td>
<td>320</td>
<td>-3.95</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vocational H.S.</td>
<td>226</td>
<td>19.73</td>
<td>3.34</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance-approach goal</td>
<td>School type</td>
<td>Anatolian H.S.</td>
<td>96</td>
<td>13.16</td>
<td>5.53</td>
<td>320</td>
<td>-3.65</td>
<td>.000</td>
</tr>
<tr>
<td>orientation</td>
<td></td>
<td>Vocational H.S.</td>
<td>226</td>
<td>15.60</td>
<td>5.48</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance-avoidance goal</td>
<td>School type</td>
<td>Anatolian H.S.</td>
<td>96</td>
<td>12.33</td>
<td>4.53</td>
<td>320</td>
<td>-4.50</td>
<td>.000</td>
</tr>
<tr>
<td>orientation</td>
<td></td>
<td>Vocational H.S.</td>
<td>226</td>
<td>14.59</td>
<td>3.95</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
According to the analysis result in Table 2, student views vary in the mastery-oriented learning dimension based on gender variable $t_{(320)}= 2.10; p < 0.05$. Female students exhibit more mastery-oriented learning than male students. There is no significant variance in the views in performance-approach and performance-avoidance oriented learning dimensions. Student views vary in mastery $t_{(320)}= 3.95; p < 0.05$, performance-approach $t_{(320)}= 3.65; p < 0.05$ and performance-avoidance $t_{(320)}= 4.50; p < 0.05$ oriented learning dimensions based on school type. Vocational school students’ views are more positive than Anatolian high school students’ in all dimensions.

Results of ANOVA conducted to see whether or not student views vary based on grade variable are provided in Table 3 below.

**Table 3**

ANOVA Results for Learning Levels based on Grade Variable

<table>
<thead>
<tr>
<th>Factor</th>
<th>Grades</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>F</th>
<th>P</th>
<th>Significant Difference (LSD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mastery goal orientations</td>
<td>1. Grade 9</td>
<td>60</td>
<td>19.16</td>
<td>3.64</td>
<td>318</td>
<td>3.48</td>
<td>.016</td>
<td>2-4</td>
</tr>
<tr>
<td></td>
<td>2. Grade 10</td>
<td>111</td>
<td>19.78</td>
<td>3.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Grade 11</td>
<td>121</td>
<td>19.29</td>
<td>4.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Grade 12</td>
<td>30</td>
<td>17.33</td>
<td>4.38</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance-approach goal orientation</td>
<td>1. Grade 9</td>
<td>60</td>
<td>15.03</td>
<td>5.48</td>
<td>318</td>
<td>2.23</td>
<td>.085</td>
<td>2-3</td>
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<tr>
<td></td>
<td>2. Grade 10</td>
<td>111</td>
<td>14.07</td>
<td>5.38</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Grade 11</td>
<td>121</td>
<td>15.79</td>
<td>5.78</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Grade 12</td>
<td>30</td>
<td>13.84</td>
<td>5.56</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance-avoidance goal orientation</td>
<td>1. Grade 9</td>
<td>60</td>
<td>13.96</td>
<td>3.79</td>
<td>318</td>
<td>2.68</td>
<td>.047</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>2. Grade 10</td>
<td>111</td>
<td>13.51</td>
<td>4.34</td>
<td></td>
<td></td>
<td></td>
<td>3-2</td>
</tr>
<tr>
<td></td>
<td>3. Grade 11</td>
<td>121</td>
<td>14.62</td>
<td>4.17</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td></td>
<td>4. Grade 12</td>
<td>30</td>
<td>12.46</td>
<td>4.76</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to the analysis results in Table 3, student views vary significantly in the mastery $F_{(3,318)}= 3.48; p < 0.05$, performance-approach $F_{(3,318)}= 2.23; p < 0.05$, and performance-avoidance $F_{(3,318)}= 2.68; p < 0.05$ oriented learning dimensions. According to Dunnett’s C and LSD test result aimed at finding the source of the variance, tenth grade students have more positive views than twelfth grade students in the mastery-oriented learning dimension; eleventh grade students have more positive views than tenth grade students in the performance-approach oriented learning dimension; and eleventh grade students have more positive views than twelfth and tenth grade students in the performance-avoidance oriented learning dimension. Results of regression analysis conducted to see whether student learning orientation is a predictor of authentic engagement dimension are provided in Table 4 below.
There is a medium-level relationship between mastery-oriented learning and authentic engagement ($R=0.314$, $R^2=0.099$). The said variable explains approximately 10% of the total variance in authentic engagement. When the correlation between the predictor variable and the predicted variable is examined, a medium-level positive relationship ($r=0.314$) is seen between mastery-oriented learning and authentic engagement. Results of regression analysis conducted to see whether student learning orientation is a predictor of the engagement dimension at rebellion level are provided in Table 5 below.

Table 5

Prediction of Authentic Engagement Dimension according to Learning Orientations

<table>
<thead>
<tr>
<th>Predictors</th>
<th>$B$</th>
<th>Standard Error $B$</th>
<th>$\beta$</th>
<th>$T$</th>
<th>$p$</th>
<th>Bilateral $r$</th>
<th>Partial $r$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mastery Goal</td>
<td>.596</td>
<td>.101</td>
<td>.314</td>
<td>5.92</td>
<td>.000</td>
<td>0.314</td>
<td>0.314</td>
</tr>
<tr>
<td>Constant</td>
<td>17.893</td>
<td>1.976</td>
<td></td>
<td>9.056</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$R=0.314$ $R^2=0.099$

There is a low-level relationship between mastery-oriented learning and engagement at rebellion level ($R=0.174$, $R^2=0.030$). The said variable explains approximately 3% of the total variance in engagement at rebellion level. When the correlation between the predictor variable and the predicted variable is examined, a low-level negative relationship ($r=-0.174$) is seen between mastery-oriented learning and engagement at rebellion level. Results of regression analysis conducted to see whether student learning orientation is a predictor of ritual engagement dimension are provided in Table 6 below.

Table 6

Prediction of Engagement Dimension at Rebellion Level according to Learning Orientations

<table>
<thead>
<tr>
<th>Predictors</th>
<th>$B$</th>
<th>Standard Error $B$</th>
<th>$\beta$</th>
<th>$T$</th>
<th>$p$</th>
<th>Bilateral $r$</th>
<th>Partial $r$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mastery Goal</td>
<td>-.422</td>
<td>2.623</td>
<td>-.174</td>
<td>-3.153</td>
<td>.000</td>
<td>-0.174</td>
<td>-0.174</td>
</tr>
<tr>
<td>Constant</td>
<td>36.327</td>
<td>1.976</td>
<td></td>
<td>13.84</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$R=0.174$ $R^2=0.030$

$F(1, 320)=9.943$ $p=.002$
Table 6
Prediction of Ritual Engagement Dimension according to Learning Orientations

<table>
<thead>
<tr>
<th>Predictors</th>
<th>B</th>
<th>Standard Error B</th>
<th>β</th>
<th>T</th>
<th>p</th>
<th>Bilateral r</th>
<th>Partial r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mastery Goal</td>
<td>-229</td>
<td>.078</td>
<td>-.162</td>
<td>-2.928</td>
<td>.000</td>
<td>-0.162</td>
<td>-0.162</td>
</tr>
<tr>
<td>Constant</td>
<td>18.660</td>
<td>1.533</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There is a low-level relationship between mastery-oriented learning and ritual engagement ($R=.162$, $R^2=.026$). The said variable explains approximately 3% of the total variance in class engagement at rebellion level. When the correlation between the predictor variable and the predicted variable is examined, a low-level negative relationship ($r = -0.162$) is seen between mastery-oriented learning and ritual engagement.

Discussion and Conclusion

When students’ learning orientations are examined, they are seen to adopt mastery-oriented learning mostly, which is followed by performance-avoidance oriented and performance-approach oriented learning. When the results of the analysis conducted according to the gender variable is examined, female students are seen to learn better with mastery goal orientation. In other words, female students have more intrinsic motivation to learn than male students do. This finding is in alignment with the findings of the research previously conducted. Urdan, Midgley and Anderman (1998), Anderson and Dixon (2009), Aydin (2010), Alonso-Tapia, Huertaz, and Huriz (2010), Özkal (2013), and Oga-Baldwin and Nakata (2017) suggest in their research that female students had more inner drive than male students. However, Smith and Sinclair (2005) and Abrahamsen, Robert, and Pensgaard (2007) suggest that the gender variable did not create a significant variance in learning motivation, and Erdem-Keklik and Keklik (2014) suggest that female students mostly learn with performance-avoidance goal motivation. Nayir (2015) found that male students were engaged more at rebellion and ritual level; in other words, male students learned with performance-approach and performance-avoidance goal orientation. At this point, it can be said that the gender variable must be studied more closely in the future.

When the results of the analysis conducted according to the school type variable is examined, vocational school students are seen to be more positive than Anatolian high school students in the mastery-oriented learning, performance-approach oriented learning, and performance-avoidance oriented learning dimensions.
According to this, vocational school students can be said to be influenced by motivational factors more than Anatolian high school students are. In Turkey, vocational schools are known to have easy admission criteria and are preferred by students who fail to be admitted to any other school and have a low success level. In other words, these students do not experience the feeling of success and want to experience it. Therefore, these students can be said to be more easily influenced by motivational factors.

When an analysis was conducted on the results according to the grade variable, tenth grade students are seen to have more intrinsic and extrinsic motivation than twelfth grade students and eleventh grade students are seen to have more intrinsic and extrinsic motivation than tenth and twelfth grade students. We can conclude, therefore, that intrinsic motivation decreases as the grade level increases. Ryan and Deci (2000), Aydin (2010), Gillet, Vallerand, and Lafreniere (2012), Ozkal (2013), and Erdem-Keklik and Erdem (2014) all reached a similar finding in their research. This may be because twelfth grade students are especially affected by the university admission test. High school seniors may be afraid of making mistakes out of fear of failure and have low self-expectations as they are expected to succeed in the test. Erdem-Keklik and Keklik (2014), on the other hand, attributed this to the fact that ninth grade students are more motivated as they are starting a new school and tenth grade students are more motivated as they are supposed to choose a field of study. At this point, families’ attitudes may be important, as families of twelfth grade students act with expectation and establish an authority over students that may affect students’ motivation level. The research suggested that children of autocratic families were mainly motivated by extrinsic factors (Grolnick, Ryan, & Deci, 1991; De Bruyn, Dekovid, & Meijnen, 2003).

The result of the present study suggests that mastery-oriented learning is a significant predictor of all dimensions of class engagement. In a similar way, Martin and Eliot (2016) found that personal mastery goals predicted higher motivation and engagement. According to this, there is positive relationship between learners with mastery goal orientation and authentic engagement and a negative relationship between authentic engagement and rebellion and ritual engagement. In other words, while students with intrinsic motivation are authentically engaged, ritual engagement and rebellion appear as intrinsic motivation decreases. The research suggest that students motivated by extrinsic factors exhibit ritual engagement (Saeed & Zyngier, 2012), and that students with intrinsic motivation exhibit authentic engagement (Ryan & Deci, 2009; Schlechty, 2002). In addition, increasing students’ motivation is related to students’ engagement with practice learning in behavioral, emotional, and agentic dimensions (Wang, Qiao, & Chui, 2017).

The present study investigated the relationship between student motivation and class engagement levels. The research has revealed that motivation level is related to class engagement, that vocational school students are affected more by motivational factors and that motivation level decreases as grade level increases. Also, mastery-oriented learning is a significant predictor of all dimensions of class engagement.
There is yet more research needed on the gender variable. Along this line, it may be suggested that the use of intrinsic drives may increase the success of vocational school students. Teachers and school administrators must use more motivational tools for vocational school students. Tas (2016) suggested in her research there is a positive relationship between student engagement and learning environment. Also, in-class activities may be planned to make high school seniors more engaged in class. It is believed that the future research must focus on the gender variable and investigate the relationship between the roles of teachers in class and student motivation levels.

References
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**Öğrencilerin Motivasyon Düzeyi ile Derse Katılım Düzeyi Arasındaki İlişki**

**Atıf:**


**Özet**


Araştırmanın Amacı: Bu çalışmanın amacı lise öğrencilerinin derse katılım düzeyleri ile motivasyon düzeyleri arasındaki ilişkiyi incelemektir. Bu doğrultuda aşağıdaki sorulara yanıt aranmıştır.

1. Öğrencilerin motivasyon düzeyi üstalaşma yönelimi, performan-yaklaşma yönelimi ve performans kaçınma yönelimi boyutlarında nasıl var mıdır?

2. Öğrencilerin motivasyon düzeyi cinsiyet, sınıf düzeyi, ve okul türüne göre farklılık göstermekte midir?

3. Öğrencilerin motivasyon düzeyi ile derse katılım düzeyleri arasında anlamlı bir ilişki var mıdır?


Anahtar Sözcükler: İçsel motivasyon, dışsal motivasyon, gerçek katılım, sembolik katılım, isyan.